



12 March 2003

INFORMATION PAPER

SUBJECT: Auwaiakeakua Stream, Waikoloa, Hawaii

1. Purpose: To provide information on the subject project.

2. Points of Major Interest and Facts.

- a. In 1996 heavy rains overtopped portions of Auwaiakeakua Stream and damaged residences in Waikoloa Village. By letter dated 30 September 1999, the sponsor, County of Hawaii requested that the U.S. Army Corps of Engineers conduct reconnaissance investigation to determine whether Federal participation in the construction of flood control measures is possible. This project was investigated under Section 205, Small Flood Control Projects, Continuing Authorities Program.
- b. Auwaiakeakua Stream is located in Waikoloa, Hawaii. Waikoloa Village is a residential community consisting of single and multi-family dwellings, a golf course, and a shopping center. The village includes an area of approximately 4,000 acres located immediately north of Waikoloa Road. The upstream drainage is relatively flat with heavy grasslands characterized by deep washes, gulches, and rough a'a lava rock.
- c. During a preliminary site investigation this summer with the Honolulu District and Hawaii County personnel, it appeared that channel overtopping occurred due to inadequate channel capacity and undersized culverts at Paniolo Avenue and Lua Kula Street. Structural alternatives to increase the capacity of the culverts and stream channel will be reviewed during feasibility phase. This would include adding a third barrel to the culvert at Paniolo Street, expanding the bottom width of the channel just downstream of Paniolo Street, and placing concrete rubble masonry on the channel sides and invert.
- d. The primary benefits associated with a flood control project are the reduction of inundation damages to structures and contents. An economic analysis of the cost of the flood control features and the benefits associated with the project was completed, December 2002. The initial feasibility investigations determined that the project has a very low benefit-to-cost ratio and is not able to justify a Federal interest. The estimated benefit-to-cost ratio was 0.02. The District has recommended to Pacific Ocean Division that further work on the Section 205 study for Auwaiakeakua Stream be terminated. Concurrence is pending.
- 3. Congressional Interest. There is minimal Congressional interest in this project, at this time.